

**UCSC****University of Colombo, Sri Lanka***University of Colombo School of Computing***DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY  
(EXTERNAL)**Academic Year 2024 — 3<sup>rd</sup> Year Examination — Semester 6**IT6506 — e-Business Technologies***Structured Question Paper*  
(2 Hours)**To be completed by the candidate****Index Number**

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**Important Instructions**

- The duration of the paper is **2 hours**.
- The medium of instructions and questions is English. Students should answer in the medium of English language only.
- This paper has **4 questions** on **16 pages**. Answer **all** questions.
- All questions carry **equal** marks.
- Write your answers **only on the space provided** on this question paper.
- Do not tear off any part of this question paper. Under no circumstances may this paper (or any part of this paper), used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper. If a page or part of a page is not printed, please inform the supervisor/invigilator immediately.
- Any electronic device capable of storing and retrieving text, including electronic dictionaries, smartwatches, and mobile phones, is not allowed.
- Calculators are **not allowed**.
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**To be completed by  
the examiners**

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<b>2</b>	
<b>3</b>	
<b>4</b>	
<b>Total</b>	

1) **Use the following case study to answer the questions given below.**

LankaTees (Pvt) Ltd. is a Sri Lankan-based custom T-shirt printing company established in 2017 by Mr Lankanath Thenuwara who has been working with his father who was in the Garment field all his life. The business caters to a growing demand for personalized and branded apparel across the country. Combining screen printing, heat transfer, and direct-to-garment (DTG) technology, LankaTees serves individuals, small businesses, schools, universities, and corporate clients. The company has skilled in-house design team who help clients with artwork, giving a creative edge over cheaper print-only competitors.

With a strong focus on affordability, design quality, and fast turnaround, LankaTees has built a loyal customer base and grown into one of the most recognized names in the local custom apparel market. Its factory and the shop are situated in Maharagama and by 2025, there are 12 staff members working there with the owner, graphic designers, logistics staff, sales reps and operational staff and printing machine staff. The local fashion and apparel sector is valued at over LKR 150 billion, largely driven by exports. Demand for local custom T-shirt printing is rising due to youth culture, university events, and corporate branding needs. Online awareness and social media promotions have increased market penetration for local printing businesses. However, LankaTees still uses Manual Order Processing and semi-automated machinery where manual intervention is needed.

The target customers are Schools, University clubs and societies, Startups and SMEs, Tourist souvenir shops (especially in Kandy, Ella, Galle), Religious and cultural event organizers (e.g., Vesak, Peraheras), etc. Delivery is done via PickMe Flash, and other in-house riders for Colombo orders. There is difficulty importing inks and vinyl materials due to forex limitations and import controls. LankaTees relies on few local suppliers and imports, making it vulnerable to forex and supply chain disruptions. Many customers also seek the lowest price, making it hard to maintain quality while remaining competitive. Training designers and screen-print operators takes time, and skilled labor is often poached by larger companies.

LankaTees want to open new branches in major cities like Kandy, Kurunegala, and Galle to capture regional markets. With steady year-on-year growth, LankaTees aims to become the leading T-shirt printing brand in Sri Lanka. Its future plans include: Building a small-scale automated production unit, becoming a supplier of merchandise to Sri Lankan influencers and YouTubers, launching an export-friendly merch-on-demand platform targeting the Sri Lankan diaspora (UK, Canada, Australia), etc. They want to offer a digital portal for corporate clients to place bulk orders and reorders easily.

This company is hoping for a strategic expansion, digital transformation, and diversification (eco-friendly, export) for growth in the market.

- (a) Carry out a Situational Analysis for the company “LankaTees” to identify their Strengths, Weaknesses, Opportunities and Threats.

**(10 Marks)**

**ANSWER IN THIS BOX**

- (b) Carry out Michael Porter's Five Forces analysis on "LankaTees" in order to find out what forces are working on the company and whether the forces are High, Moderate or Low. Justify your answer.

**(6 Marks)**

**ANSWER IN THIS BOX**

[illegible]



2) (a) Illustrate and briefly describe the characteristics of each of the following eBusiness Models stating the benefits of the model to the company and the customers.

- (i) Full-Service Provider eBusiness Model
- (ii) Revenue sharing eBusiness Model
- (iii) Global Trade Platform for SMEs
- (iv) The Extended Enterprise

(12 marks)

**ANSWER IN THIS BOX**

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

- (b) Compare and contrast Business Process Reengineering (BPR) and eTransformation.

**(6 Marks)**

**ANSWER IN THIS BOX**



- (c) Describe an application where Information and Communication Technology (ICT) could be effectively used in the Agricultural Sector in Sri Lanka to solve a problem. Briefly discuss the following in your answer:
- The problem being addressed
  - The eBusiness solution proposed
  - The challenges and benefits of the proposed solution

**(7 Marks)**

**ANSWER IN THIS BOX**

- 3) (a) Define the term "Synchronous Massive Online Courses".

(04 Marks)

**ANSWER IN THIS BOX**

- (b) List down six (06) major types of activities available in Moodle.

(06 marks)

**ANSWER IN THIS BOX**

- (c) Suppose, you are a new manager at a large tech company. The workplace has two distinct departments: software development and marketing. You notice that employees from each department tend to stick with their own groups during meetings, lunch breaks, and team-building events. Developers often describe marketers as “disorganized” and “too emotional,” while marketers describe developers as “antisocial” and “overly technical.” This behavior is causing friction and poor collaboration between the departments.

- (i) Using Social Identity Theory, explain how employees' behaviors demonstrate social categorization, social identification, and social comparison.

**(06 Marks)**

**ANSWER IN THIS BOX**

- (ii) What are the in-groups and out-groups in this case for developers?

**(02 Marks)**

**ANSWER IN THIS BOX**[illegible]

- (d) Assume that you are a digital marketing strategist managing an ad campaign for a new online clothing store. The client has allocated a fixed amount of \$1,000 to be spent over a 20-day promotional period, with specific goals for reach and engagement. They do not plan to increase or decrease the budget during this time and want to ensure the budget is distributed optimally over the entire campaign duration without daily manual adjustments.

Based on the client's requirements, which Facebook ad budget type would be most appropriate for the above scenario? Justify your answer.

**(04 Marks)**

**ANSWER IN THIS BOX**

- (e) List down three (03) Types of ads supported on Instagram.

**(03 Marks)**

**ANSWER IN THIS BOX**

- 4) (a) In supply chain management, there are two main ways that companies plan how products are ordered, made, and delivered. These two approaches are used in different situations depending on things like customer demand, how long it takes to make products, and what the business wants to achieve. Knowing the differences between these approaches can help companies work more efficiently, save money, and keep customers happy.

Answer the following questions about the two supply chain approaches described above:

- (i) Identify and briefly describe the two primary models used in supply chain management.

**(04 Marks)**

**ANSWER IN THIS BOX**

- (ii) What is the main goal or purpose of each model provided for the question 4 (a) (i) ?

**(02 Marks)**

**ANSWER IN THIS BOX**

- (iii) List down two (02) key features of each approach.

**(04 Marks)**

**ANSWER IN THIS BOX**


- (b) Briefly explain three (03) customer extension techniques for CRM that are particularly important to e-Businesses.

**(06 Marks)**

**ANSWER IN THIS BOX**


- (c) Assume that, you are a digital marketing intern at an e-commerce company that wants to launch an online advertising campaign. The marketing team has selected “App promotion” as the campaign goal because the company recently launched a new mobile shopping app. Using this scenario, which ad format would be the most suitable for this campaign goal? Explain why.

**(03 Marks)**

**ANSWER IN THIS BOX**

- (d) List down three (03) examples of cryptocurrency exchanges.

**(03 Marks)**

**ANSWER IN THIS BOX**

- (e) Assume that, you are working with a client who owns a popular news website and has recently launched a mobile news app. The client is interested in earning money by showing ads to app users. However, they are not sure which Google platform to use for each type of content. If the client wants to display ads on their mobile app, which Google platform should they use? Justify your answer.

(03 Marks)

**ANSWER IN THIS BOX**

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